

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): An exposure apparatus, comprising:

an exposure apparatus main body that transfers a predetermined pattern onto a substrate;

an exposure chamber that houses at least a part of said exposure apparatus main body, and in which environmental conditions are kept substantially constant;

an air conditioner that performs air conditioning inside said exposure chamber;

a machine chamber that houses at least a part of said air conditioner;

a supply path of gas for air conditioning supplied from said machine chamber into said exposure chamber;

a first chemical substance removing filter arranged in part of said supply path;

an exhaust path that forms a path of said gas for air conditioning that returns to said machine chamber from said exposure chamber; and

a second chemical substance removing filter arranged in part of said exhaust path to remove chemical impurities in said gas for air conditioning.

Claim 2 (Original): The exposure apparatus according to claim 1, wherein

said exposure chamber and said machine chamber are severally formed inside different chambers.

a floor, and

said exposure chamber and said machine chamber are connected with each other via a freely detachable connection unit.

Claim 4 (Original): The exposure apparatus according to claim 3, wherein said connection unit is constituted by an expandable and contractable bellows-like member.

Claim 5 (Original): The exposure apparatus according to claim 3, wherein said first chemical substance removing filter is arranged in the vicinity of said connection unit.

Claim 6 (Original): The exposure apparatus according to claim 1, wherein said exposure chamber and said machine chamber are formed in a same chamber.

Claim 7 (Original): The exposure apparatus according to claim 1, wherein said machine chamber is provided with an outside air inlet, and said exposure apparatus further comprising: a third chemical substance removing filter arranged in a path of air that is taken in through said outside air inlet.

Claim 8 (Original): The exposure apparatus according to claim 1, wherein part of said supply path that is downstream of said first chemical substance removing

Claim 9 (Original): The exposure apparatus according to claim 1, wherein

said supply path is divided into a plurality of paths in the downstream of said first chemical substance removing filter arranged in part of the supply path, and

wherein each of said plurality of paths is connected to a respective chamber of a plurality of different chambers including said exposure chamber.

Claim 10 (Original): The exposure apparatus according to claim 9, wherein each of said plurality of paths is provided with an air filter to remove particles in the vicinity of a blow port of said gas for air conditioning to each of said plurality of different chambers.

Claim 11 (Original): The exposure apparatus according to claim 1, wherein said air conditioner includes a cooler that cools the gas for air conditioning, which circulates within said machine chamber, and a heater that heats the cooled gas, and said exposure apparatus further comprising: a controller that controls the surface temperature of said cooler so that condensation does not occur.

Claim 12 (Original): The exposure apparatus according to claim 1, wherein said exposure apparatus main body includes a substrate stage that holds said substrate and an interferometer that measures a position of said substrate stage, and said exposure apparatus further comprising: another air conditioner that performs air conditioning of a part of the space inside said exposure chamber, where said substrate stage

Claim 13 (Original): The exposure apparatus according to claim 12, wherein

said another air conditioner shares a part of said air conditioner.

Claim 14 (Original): The exposure apparatus according to claim 1, wherein
a surface of said substrate is coated with a chemically amplified resist as a
photosensitive agent.

Claim 15 (Original): A device manufacturing method including a lithography
process, wherein
exposure is performed in said lithography process by using the exposure apparatus
according to claim 1.

Claim 16 (Original): An exposure apparatus, comprising:
an exposure apparatus main body that transfers a predetermined pattern onto a
substrate;
an exposure chamber that houses at least a part of said exposure apparatus main body,
and in which environmental conditions are kept substantially constant;
a machine chamber connected to said exposure chamber via a supply path and via an
exhaust path;
an air conditioner arranged in said machine chamber that includes a cooler to cool gas
for air conditioning circulating within the machine chamber and that performs air
conditioning inside said exposure chamber; and

Claim 17 (Original): The exposure apparatus according to claim 16, wherein said air conditioner further includes a heater that is arranged in said machine chamber and that heats said cooled gas.

Claim 18 (Original): The exposure apparatus according to claim 16, further comprising:

a drain pan arranged below said cooler in a direction of gravity.

Claim 19 (Original): The exposure apparatus according to claim 18, wherein said drain pan is a drain pan that is not connected to a pipe system.

Claim 20 (Original): The exposure apparatus according to claim 16, wherein said exposure apparatus main body includes a substrate stage that holds said substrate and an interferometer that measures a position of said substrate stage, and

said exposure apparatus further comprising: another air conditioner that performs air conditioning of a part of the space inside said exposure chamber, where said substrate stage and said interferometer are arranged, independently of said air conditioner.

Claim 21 (Original): The exposure apparatus according to claim 20, wherein said another air conditioner shares a part of said air conditioner.

photosensitive agent

Claim 23 (Original): A device manufacturing method including a lithography process, wherein

exposure is performed in said lithography process by using the exposure apparatus according to claim 16.

Claim 24 (Original): An exposure apparatus, comprising:

an exposure apparatus main body that transfers a pattern formed on a mask onto a substrate;

an exposure chamber that houses said exposure apparatus main body; and

another chamber constituting an environmental control chamber separate from said exposure chamber and arranged on a side of said exposure chamber, wherein

a blow port of gas for air conditioning supplied into said exposure chamber is provided in a boundary area between said exposure chamber and said another chamber.

Claim 25 (Original): The exposure apparatus according to claim 24, further comprising:

a mask transportation system housed in said another chamber, which transports a mask into said exposure apparatus main body and transports said mask from said exposure apparatus main body.

an air filter to remove particles, which is arranged on the side of said blow port opposite said another chamber.

Claim 27 (Original): The exposure apparatus according to claim 24, further comprising:

a chemical substance removing filter arranged in the exhaust path of said gas for air conditioning that returns from said exposure chamber to an air conditioner for said exposure chamber.

Claim 28 (Original): The exposure apparatus according to claim 27, wherein said air conditioner includes a cooler that cools said gas for air conditioning, and said exposure apparatus further comprising: a controller that controls the surface temperature of said cooler so that condensation does not occur.

Claim 29 (Original): The exposure apparatus according to claim 24, wherein supply paths and an exhaust paths are constructed and arranged for said exposure chamber and said another chamber such that air conditioning thereof is performed by a same air conditioner.

Claim 30 (Original): The exposure apparatus according to claim 24, wherein said exposure apparatus main body includes a substrate stage that holds said substrate

said exposure apparatus further comprising: another air conditioner that performs air conditioning of a part of the space inside said exposure chamber, where said substrate stage and said interferometer are arranged, independently of said air conditioner.

Claim 31 (Original): The exposure apparatus according to claim 30, wherein said another air conditioner shares a part of said air conditioner.

Claim 32 (Original): The exposure apparatus according to claim 24, wherein a surface of said substrate is coated with a chemically amplified resist as a photosensitive agent.

Claim 33 (Original): A device manufacturing method including a lithography process, wherein

exposure is performed in said lithography process by using the exposure apparatus according to claim 24.

Claims 34-35 (Cancelled).

Claim 36 (Original): An environmental control method of an exposure apparatus that supplies gas at least the temperature of which is controlled into an exposure chamber that houses at least a part of an exposure apparatus main body such that environmental conditions

said gas is made to pass through a cooler before supplying said gas into said exposure chamber and the surface temperature of said cooler is set at such a temperature that condensation does not occur.

Claim 37 (Original): An exposure apparatus, comprising:

an exposure apparatus main body that transfers a predetermined pattern onto a substrate;

a substrate transportation system that transports said substrate to said exposure apparatus main body;

a first chamber that houses at least a part of said exposure apparatus main body and in which environmental conditions are kept substantially constant;

a first return duct an end of which is connected to said first chamber and through which gas exhausted from said first chamber passes;

a second chamber that houses at least a part of said substrate transportation system and in which environmental conditions are kept substantially constant;

a second return duct an end of which is connected to said second chamber and through which gas exhausted from said second chamber passes; and

a first chemical substance removing filter that is connected to another end than said end of said first return duct and to another end than said end of said second return duct and that removes chemical impurities in both of gas exhausted from said first chamber and gas exhausted from said second chamber.

comprising:

a mask transportation system that transports a mask on which said predetermined pattern is formed.

Claim 39 (Original): The exposure apparatus according to claim 38, wherein said mask transportation system includes a storing section that stores a plurality of masks.

Claim 40 (Original): The exposure apparatus according to claim 38, further comprising:

a third chamber that houses at least a part of said mask transportation system and in which environmental conditions are kept substantially constant; and

a third return duct an end of which is connected to said third chamber and through which gas exhausted from said third chamber passes, and wherein

another end than said end of said third return duct is connected to said chemical substance removing filter together with said another end of said first return duct and said another end of said second return duct.

Claim 41 (Original): The exposure apparatus according to claim 37, further comprising:

a machine chamber in which a cooler, a heater and a blower that blows temperature-adjusted gas to said first chamber are arranged, and wherein

said second return duct via an opening made in part of said machine chamber

Claim 42 (Original): The exposure apparatus according to claim 41, further comprising:

a second chemical substance removing filter that is arranged in part of a supply path for supplying temperature-adjusted gas from said machine chamber at least to said first chamber and removes chemical impurities in said temperature-adjusted gas.

Claim 43 (Original): The exposure apparatus according to claim 42, wherein said machine chamber and said first chamber are connected to each other to be separable, and

wherein said second chemical substance removing filter is arranged in the vicinity of the connection between said machine chamber and said first chamber.

Claim 44 (New): An environmental controller configured for environmental control inside an environmental control chamber in which an exposure apparatus that transfers a predetermined pattern onto a substrate is arranged, said environmental controller comprising:

a blower that blows air into said environmental control chamber;

a cooler arranged upstream of said blower that cools down the air blown into said environmental control chamber by said blower;

a sensor arranged on said cooler that detects the temperature of a surface of said cooler; and

occur on the surface of the cooler

Claim 45 (New): The environmental controller according to claim 44, wherein
said controller controls said cooler in accordance with a detection result of said sensor
so that condensation does not occur on the surface of said cooler in humidity and pressure of
air passing through said cooler.

Claim 46 (New): The environmental controller according to claim 45, further
comprising:

a drain pan arranged below said cooler that has no pipe system connected to the
outside.

Claim 47 (New): The environmental controller according to claim 46, wherein
said controller controls said cooler in accordance with a detection result of said sensor
to maintain said surface temperature between 5°C and 15°C so that condensation does not
occur on the surface of said cooler.